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Project Management Checklist*

There are four categories of technology projects in the South Carolina State government with each having different administrative and management requirements. The four categories are:

- 1. Minor Project Less than \$50,000, minor investment, informal schedule goals, low organizational priority and visibility
- 2. Small Project Any project having a cumulative investment of >\$50,000 and <\$1 million that does <u>not</u> have more than <u>one</u> of the following characteristics:
 - mission-critical (Any project involving a system that is critical to the functioning of an organization and the accomplishment of its mission.)
 - duration of more than 24 months
 - high risk (Any project that is rated high on the <u>Risk Evaluation</u> <u>Checklist</u>)
- 3. Major Technology Project Any project having a cumulative investment in technology of \$1,000,000 or more will be considered a Major Technology Project. In addition, if a project meets two or more of the following criteria, it will also be considered a Major Technology Project.
 - The estimated cumulative cost of the project exceeds \$400,000
 - The project is mission critical to the agency and/or the State
 - The expected duration of the project exceeds twenty-four months
 - The project is considered a high risk for success (i.e., the project involves leading edge technology, there is no qualified project manager to oversee project, etc.), or
 - The project has enterprise or multi-agency implications
- 4. Multi-agency Project Any project that involves the implementation of a technology application, system or services by a small "cluster" or by all State agencies that will share in the cost and/or the benefit of the technology. It does not include a contract between agencies where one agency is providing services for another agency. A Multi-agency Project require, at a minimum, special additional project governance, risk assessment, stakeholder management, and communications planning activities.

"Cumulative investment in technology" is the total estimated costs (i.e., human resources, supplies, equipment, administrative, operational, contractual, etc.) including "hard" and "soft" dollars that will be incurred by an agency(ies) to implement a project from initiation to closure. It does not include maintenance or ongoing operational costs that would be incurred after project closure.

This project management checklist has been designed to assist in determining what elements of effective project management should be applied to each agency project based upon the size and type of project.

Project Initiation Stage

The following table addresses vital aspects of project initiation and integration management such as the project charter, the importance of project stakeholders, and project life-cycle phases and milestones.

	Checklist			
	4	3	2	1
Category	Minor Project	Small Project	Major Project	Enterprise/Multi-Agency Project
Business Case	Business Case is developed at a high-level within the MOU.	Document the high-level business case in the Project Charter	Business Case is an expanded, separate document from the Project Charter.	Business Case is a detailed, separate document.
Business Alignment	Validate that the project is aligned with the agency's business strategy.	Validate that the project is aligned with the agency's business strategy.	Validate that the project is aligned with the agency's business strategy.	Validate that the project is aligned with the agency's business strategy.
Project Scope and Objectives	Develop the requirements or scope definition; obtain approval from Project Sponsor. Define requirements in the Project Charter memo (MOU).	Document performance based requirements specifications in the Project Charter; use a modular or phase structure for documenting functions, performance and features.	Document performance- based requirement specifications in the Project Charter. Review high-level requirements or scope definition by module or phase with customer and sponsor.	Develop high-level, inclusive requirements or scope definition and review process; where possible, map requirements to modules or phases, design and test documents; secure formal customer approval. These elements are referenced and described in the Project Charter in some detail.
Project Constraints and Assumptions	Use expert judgment to list expected constraints and assumptions; compare constraints and assumptions to risk items and determine any need to be managed as risks.	Document constraints and assumptions and discuss implications; identify any that could become risks with significant impact.	Use an established, structured method for identifying, quantifying, and assessing all potential project constraints and assumptions. Remember that C &As are considered fixed for purposes of establishing the project baseline.	Document process of identifying, quantifying and assessing constraints and assumptions. Insure stakeholder participation and approval. Remember that C &As are considered fixed for purposes of establishing the project baseline.
Stakeholder Identification and Project Communications	Identify project stakeholders (customers, sponsors, users, etc.) and summarize their interests and objectives on one page; review the project plan to ensure stakeholder satisfaction will be achieved.	Map stakeholder interests to specific initiatives to ensure satisfaction; develop, maintain, and post team success metrics; proactive stakeholder communications.	Identify and allocate staff and budget to periodic reassessments and corrective actions; focus specific initiatives to achieve stakeholder satisfaction.	Identify a structured stakeholder analysis supporting a stakeholder management plan; map to the quality plan, risk management plan, and to project reporting initiatives.
Risk Assessment	Use expert judgment to list expected risk areas; compare project objectives to risk items and identify manageable risks.	Document risk areas and evaluate low-medium- high risks; identify risks with significant impact.	Establish structured methodology for identifying, quantifying, and assessing all potential project risks.	Document risk identification, probability, and consequences for objectives, specifications, and stakeholder interests;

	Checklist				
Category	4 Minor Project	3 Small Project	2 Major Project	1 Enterprise/Multi-Agency Project	
				employ Delphi, multi- attribute utility, and PERT analysis.	
Define Roles and Responsibilities	Identify roles, responsibilities and reporting relationships for PM; clearly identify roles and responsibilities of Project Sponsor.	In addition, publish and maintain organization chart; address conflicting goals; promote team ownership of integrated solutions.	In addition, consider matrix organization with strong PM functions and administrative support.	In addition, document project roles and responsibilities in the Project Charter. Use projectized or strong matrix structure.	
High-Level Cost and Schedule Estimates	Use expert judgment to estimate and justify costs and schedules at a high-level; base cost authorization on staffing commitments; make general cost target to monitor spending.	Prepare written cost and schedule estimates at a high level; document data sources and estimating assumptions. Include significant schedule dates, if they are known.	Prepare high-level, formal cost and schedule estimates, with documented assumptions, using a consistent methodology, and historical data where available. Be prepared to revise cost and schedule estimates once WBS is completed.	Prepare high-level cost and schedule estimates, as previously described and then be prepared to revise at the work package level. Insure that Executive Sponsor and stakeholders understand that cost and schedule revisions may be necessary in the Planning Stage.	
		Deliverables			
Project Charter	Prepare a memo of understanding between the Executive Sponsor and the PM or project champion/leader outlining the project objectives/deliverables, their respective roles and responsibilities, resources, commitments, high-level schedule and costs, assumptions and constraints.	Develop a Project Charter which: identifies quantifiable project goals and objectives/delivera bles identifies high- level cost and schedule targets; identifies high- level constraints and assumptions. identifies business need, defines PM responsibilities, Project Sponsor responsibilities, outlines staffing commitments, funding, and assets.	Develop a formal Project Charter which: * identifies quantifiable project goals and objectives/deliverab les * defines specific performance goals * defines specific cost and schedule thresholds; * identifies high-level constraints and assumptions. * identifies business need, * defines PM responsibilities, Project Sponsor responsibilities, outlines staffing commitments, funding, and assets, * defines PM authority and organizational commitment.	Develop a formal Project Charter which: * identifies quantifiable project goals and objectives/deliverabl es defines specific performance goals and objectives defines specific cost and schedule thresholds; identifies high-level constraints and assumptions. identifies business need, defines PM responsibilities, Project Sponsor responsibilities, outlines staffing commitments, funding, and assets, defines PM authority and organizational commitment, includes an expressed commitment of staffing, funds, and assets by agency, section, or	

		Checklist				
	4	3	2	1		
Category	Minor Project	Small Project	Major Project	Enterprise/Multi-Agency Project		
				component.		
Business Case	Business Case is developed at a high-level within the MOU.	Document the high-level business case in the Project Charter	Business Case is an expanded, separate document from the Project Charter.	Business Case is a detailed, separate document.		

Project Planning Stage Checklist

The following table includes topics dealing with some of the most important areas of project planning, scope or requirements definition, staffing plan, as well as the time-honored work breakdown structure.

	Checklist			
	4	3	2	1
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project
Project Leadership and Management	Assign Project Manager, if not already done in Initiation Stage. Communicate goals clearly; manage the project team as a group; foster ownership of plans and tasks; build relationships through communication and consideration; set high standards and lead by example.	Assign Project Manager, if not already done in Initiation Stage. Establish clear goals and roles; institutionalize practices of communications and good will; identify and resolve issues and conflicts; delegate to workgroups, build ownership and establish success metrics.	Assign Project Manager, if not already done in Initiation Stage. Ensure management commitment and disciplined approach; emphasize communications, baselines, metrics, and issue resolution; address need for external and internal PM roles.	Assign Project Manager, if not already done in Initiation Stage. Select PM with self-discipline, coaching, communications, political savvy, technical and project experience; provide active sponsorship and senior management oversight.
Refine Project Scope or Requirements Definition	Document the Project Scope or requirements definition; obtain approval from Project Sponsor and/or key stakeholders	Develop requirements definition or Scope Statement. Document business case and detailed performance based requirements specifications; use modular structure for documenting functions, performance and features.	Develop requirements definition or Scope Statement. Review detailed requirements definition with customer and sponsor; employ walk-thrus, simulations, prototypes, demonstrations, mockups or draft user documentation.	Conduct a rigorous, extensive requirements definition and review process; map requirements to design and test documents; conduct independent peer reviews and formal customer approval.
Staffing Plan	Identify resource requirements, assign staff, and get them applied to the project work; decide what before who; monitor adequacy of staffing and report status to project sponsor.	Involve team in planning process. Consider project tasks and organization first, then plan staff to fill requirements; build highlevel staff plan; delegate ownership of staffing plan;	Perform structured analysis of skill types and quantities; use resource scheduling estimates; plot graph of staffing requirements versus actuals and report status periodically.	Determine skill levels from work package estimates; identify experience requirements and gap analysis; use metrics as critical success factor; plan hiring and training to meet deltas.
Work Breakdown Structure	Prepare WBS to ensure comprehensive identification of tasks and outputs; firm-up WBS structure early.	Use WBS to prepare responsibility matrix, cost estimates, and schedules; publish WBS as a project baseline document.	Prepare WBS dictionary; use WBS structure to aggregate cost data.	Use product-oriented WBS to organize requirements, schedules, budgets, testing, and deliverables; map WBS to project organizational breakdown structure.
Schedule Estimating	Estimate schedule durations based on judgment, staff-months, and duration analogies to previous work; identify schedule dependencies, assess schedule risk	Document schedule estimates based on historical data and estimates of work and staffing; keep work packages smaller than two weeks; assess schedule risk	Document schedule assumptions and estimating methodology; evaluate and elevate schedule uncertainties; obtain independent expert	Use documented schedule estimating methodology; apply historical data, analogies, and expert judgments; obtain team ownership of schedules; quantify risks and apply

	Checklist				
Category	4 Minor Agency Project	3 Small Agency Project	2 Major Project	1 Enterprise/Multi-Agency Project	
	areas.	and apply contingencies.	assessment of schedule	contingencies.	
	areas.	and apply contingencies.	realism.	contingencies.	
Critical Path Analysis	Identify critical path identified informally on Gantt schedule; keep team members mindful of critical path; have PM consider ways to shorten critical path.	Identify schedule dependencies and hand- offs; use a CPM graphic to compute and display the critical path; report status periodically, and look for ways to shorten the path.	Conduct risk assessment along the critical path; manage the critical path to tighten and identify workarounds; rethink dependencies to accelerate overall schedule.	Conduct statistical assessment of schedule risks (PERT); examine opportunities for streamlining, crashing, and concurrencies; watch for near-critical paths and assess risks.	
Refine Project Schedules	Refine project target date with immediate milestones, prepare project schedule and circulate to team members; obtain team buy-in on project schedule goals.	Prepare top-level schedule and sub-team rollups; identify major and intermediate milestones; scrutinize dependencies; maintain baseline stability between major milestones or formal replans.	Publish schedules and keep updates visible; maintain schedule baseline discipline and traceability; document milestone exit criteria; report and track schedule variances and performance indexes.	Use comprehensive automated scheduling system; document procedures for schedule baseline management and data collection; swarm problem areas with micro- schedules and daily status meetings.	
Cost Analysis	Prepare cost estimates informally.	Prepare written cost estimates using available data, judgment and analogy; apply ball-park estimates to project changes and decision points; identify cost drivers.	Apply documented and systematic approaches to cost impacts of project decisions; review estimates and conduct sensitivity analysis on major assumptions.	Prepare documented costs estimates for changes; maintain auditable files of backup assumptions, data, and methodologies; use a standard WBS to build historical cost database for future estimates.	
Refine Project Organization	Refine and/or revise roles, responsibilities, and reporting relationships; encourage informal communications.	Refine and/or revise published and maintained organization chart; address conflicting goals and loyalities; promote team ownership of integrated solutions.	Consider matrix organization with strong PM functions and administrative support; document plan to surmount structural short-comings; use cross-functional teams to help concurrencies.	Document project roles and responsibilities; map organizational breakdown structure (OBS) to WBS and communications plan; use projectized or strong matrix structure.	
Procurement Process	Identify requirements, costs, and lead-times for procurements; discuss administrative and performance risks.	Document contracting approaches and administrative lead-times; factor administrative preparations into staffing, budgets, and schedules.	Write administrative checklist for procurements; develop structured approach to document requirements and deliverables; prequalify suppliers and build vendor working relationships.	Apply PM analysis to budget and schedule for procurement tasks; define requirements, establish contract types, write SOWs, develop selection criteria and establish contract administration.	
Refine Cost Estimating	Apply expert judgment to estimate and justify costs; base cost authorization on staffing commitments; make general cost target to monitor spending.	Prepare written cost estimate; document data sources and estimating assumptions; validate estimate by analogy and using historical data.	Prepare formal cost estimate, with documented assumptions, using a consistent methodology, and historical data; require approval by experienced estimator.	Prepare cost estimates at the work package level; use modeling, sensitivity analysis and identification of cost risks; obtain independent cost assessment; produce auditable backup package.	
Refine Budgeting	Establish ball-park estimates of time-phased budget goals; track staff usage against plan to assess project spending.	Allocate budgets by groups, where applicable, within the project, establish project level spend plan and track and	Budgets allocated by group or WBS element; preparation of multiple spend plans; groups track and report	Rollup or allocate project budgets by WBS element; cost account managers commit to costs; collect data at the work package level;	

	Checklist			
	4	3	2	1
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project
		report actuals.	spending.	establish time phased budget baseline at the cost account level.
Life Cycle Phases and Milestones	Define basic phases, milestones, decision points, accomplishments, and deliverables.	Prepare project plan inputs with discussion of phases, deliverables, objectives and success criteria; establish immediate milestones within project phases.	Include in project plan linkages between milestone approval reviews and documents, updated estimates, test results, etc.	Define event-based milestones; establish milestone exit criteria; link to deliverables, baseline document updates, test results, and management reviews.
Organizational Change Management	Plan the change. How do you plan to reach the goals, what will you need to reach the goals, how long might it take and how will you know when you've reached your goals or not? Have the Executive Sponsor in charge of the plan.	Plan the change. How do you plan to reach the goals, what will you need to reach the goals, how long might it take and how will you know when you've reached your goals or not? Have the Executive Sponsor in charge of the plan.	Plan the change. How do you plan to reach the goals, what will you need to reach the goals, how long might it take and how will you know when you've reached your goals or not? Have the Executive Sponsor in charge of the plan.	Plan the change. How do you plan to reach the goals, what will you need to reach the goals, how long might it take and how will you know when you've reached your goals or not? Have the Executive Sponsor in charge of the plan.
Communications Planning	Notify sponsor and stakeholders of Project Charter. Plan for status reports, as appropriate.	Identify communications requirements, technologies, constraints and assumptions; draw communications flow diagram; use inclusive team structure to shorten communications paths.	Use stakeholder analysis to identify communications paths; plan for multiple communications media; plan to shorten vital information paths by new relationships, attitudes, or techniques.	Document plans for public relations, change management, working papers and deliverables, project advocacy, and internal project team communications.
Quality Assurance (QA) Plan and Continuous Quality Improvement (CQI)	Define quality goals and metrics.	Document explicit quality goals; define methods and tests to achieve, control, predict and verify success; plan work methods, technologies, measurements and controls to achieve goals.; focus on customer satisfaction. Review the project approach and design concept for modularity, expandability and growth; consider CQI in product life cycle strategy.	Document QA goals, plans, methods, measurements and systems; identify quality management tasks and incorporate them into project plan; delegate goals to work groups; Include CQI tasks in project plans and budget; establish CQI goals and metrics, and report progress periodically.	Document QA plan including quantitative goals, statement of methods to achieve, quality metrics, controls and verifications; link QA to stakeholder and risk analysis. Assign quality management oversight in PM staff; integrate quality management into project planning and risk management. Incorporate CQI/TQM goals into specifications and plans; review project methods for improvement opportunities; institutionalize CQI processes and incorporate provisions into product design.
Risk Issue Identification Avoidance and Mitigation	Identify technologies or approaches presenting unattractive risks; plan actions to minimize risk exposure.	Assign study teams to develop risk avoidance and/or mitigation plans for excessive risk items.	Develop risk deflection strategies for all significant project risks; incorporate adaptive actions into project plans.	Develop risk deflection strategies for all significant project risks; incorporate adaptive actions into project plans.

	Checklist			
	4	3	2	1
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project
Risk Management Plan	N/A but, structure PM approach and work to minimize risk.	Address each significant risk item and apply a specific PM or technical approach to minimize, manage, and control risk events.	Develop action steps and staffing to reduce uncertainties and control risk areas.	Document plans for risk focused management attention to respond to all risk areas; apply risk templates (or lessons learned) to project life cycle.
Procurement Planning	Identify all potential acquisition transactions; discuss contracting approach, administrative requirements, and lead-times for each contract action.	Develop list of procurements; identify cost, schedule, type and quality requirements; and performance, specification, administrative, and delivery issues.	Develop structured approach for incorporating procurement management tasks into project plans, schedules, and budgets; include procurement issues in risk assessment and risk management plan.	Identify all contract actions, requirements, dollar estimates, lead times, issues, and risk management actions; obtain sponsor approval for plan; use peer review to verify realism and identify additional risks.
Procurement Liaison	Contact procurement officials and discuss plans to support project; solicit their requirements and issues; maintain active communications exchange.	Obtain procurement point of contact for project; deliver plans, assumptions, and schedules for review; incorporate comments and recommendations into project plans.	Include procurement staff in review of plans, distribution of project communications, attendance at meetings, and in project team building activities.	Identify dedicated procurement official integral to project team; solicit review and approvals for procurement plans and assumptions.
Project Baseline Control	Refine cost and schedule projections.	Identify cost and schedule baselines; report metrics to show changes against milestone estimates.	Establish cost and schedule baselines and maintain disciplined controls; report all baseline re-plans or changes; apply baseline controls to discrete work packages.	Establish firm cost and schedule baseline between major milestones; require sponsor signature for baseline re-plans; use work package approval and authorization process.
Project Change Management Planning	Use requirements document to establish baseline stability; have PM approves major changes; establish version control as product design matures.	Place Scope Statement document or requirements document under formal control; require change request approval by PM; report metrics to track scope changes.	Establish configuration identification, status accounting, control process (with ECNs and CCB chaired by PM), and configuration audits; staff a formal CM function.	Establish baseline for requirements, functional and allocated specs, and product design; evaluate ECP impact and require functional approvals prior to CCB; manage the pace of changes.
Knowledge Repository	Regardless of project size, create a central repository and inventory for all project deliverables and work products. Produce and package project working papers in project notebooks; plan early to produce complete customer support documentation; document project lessons learned.	Regardless of project size, create a central repository and inventory for all project deliverables and work products. Use documentation to establish baseline and communications in the project team; design tasks with deliverables in mind; identify design data needed for support documentation; define document set needed at finish.	Regardless of project size, create a central repository and inventory for all project deliverables and work products. Define requirements for project library, deliverables, support documentation, and historical record; budget and staff a data management function.	Regardless of project size, create a central repository and inventory for all project deliverables and work products. Establish comprehensive definition of documentation requirements; distribute standard report formats; track data production and approvals; establish project data library structure.
		Deliverables		
The Project Plan	Summarize project objectives, approach,	Employ planning process to build team ownership	Prepare a plan that links the requirements,	Produce an integrated family of documents

	Checklist				
	4	3	2	1	
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi - Agency Project	
	time constraints, cost estimates, and staffing plan; ensure these fit together and are realistic and achievable; define milestones; and link tasks to owners and deliverables.	and facilitate peer review; apply systematic methods to assess cost and schedule realism; plan more heavily in risk areas; apply all PM principles in plan.	task plans, timelines, cost estimates, staffing, deliverables, and test plan; make sure cost, scope, and time are bounded; define success criteria for milestones.	defining all project activities and disciplines; plan for mapping and traceability throughout major documents; systematically address all PMBOK ® areas.	
Project Plan Comp	onents				
Scope Statement	Documents the Project Scope or requirements definition and approved by Project Sponsor and/or key stakeholders	Documents Project Scope or requirements definition Documents business case and detailed performance based requirements specifications; uses modular structure for documenting functions, performance and features.	Documents requirements definition or Project Scope. Documents business case and detailed performance based requirements specifications; uses modular structure for documenting functions, performance and features. Reviewed and approved by customer and sponsor.	Documents requirements definition or Project Scope. Documents business case and detailed performance based requirements specifications; uses modular structure for documenting functions, performance and features. Reviewed and approved by customer and sponsor. Maps requirements to design and test documents; Reviewed and approved by customer and sponsor	
Scope Management Plan		y and frequently the project s		ated into the project. Includes cription of how scope changes	
Work Breakdown Structure	A deliverable-oriented grou	uping of project elements which	ch organizes and defines th	e total scope of the project.	
Project Network Diagram(s) and Critical Path Analysis		is any schematic display of th			
Project Schedule	The planned dates for perf	orming activities and meeting	g milestones.		
Project Team Designation and Resource Management Plan	project (project activities)	The people who report either directly or indirectly to the project manager and will perform the work of the project (project activities) are the project team. The Resource Management Plan details what resources (people, equipment, materials) are needed in what quantities to perform the project activities.			
Project Organizational Chart	Publish Organizational Chart, if applicable.	Publish Organizational Chart	Publish Organizational Chart	Publish Organizational Chart	
Project Budget	The amount and distribution	on of money allocated to a pr	oject.		
Communications Management Plan	1 -	A plan describing the information and communications needs of the project stakeholders; who needs what information, when they will need it, and how it will be given to them.			
Quality Management Plan	A plan describing which question project.	uality standards are relevant t	to the project, and how they	will be satisfied in the	

	Checklist					
	4	3	2	1		
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project		
Risk Management Plan	A plan that documents how the risk processes will be carried out during the project. This document is an output of risk management planning.					
Stakeholder Management Plan	A plan that insures the active involvement of all who can affect and be affected by the project in the definition and planning stages. Plans should describe how the following will be accomplished: • establishment good personal relationships. Expertise alone does not inspire trust and credibility; • ensuring that actions are being driven by the needs of the stakeholders, and that their needs and requirements are being considered seriously; • how recommendations from both internal and external stakeholders will be addressed • how senior executives will function as project champions to lend the project authority. how the Stakeholder Management and Communications Management Plans will be related.					
Project Control Plan	A plan for comparing actual performance with planned performance, analyzing variances, evaluating possible alternatives, and taking appropriate corrective action as needed.					

Project Managing (Executing and Control) Checklist

The following table addresses the important issues of managing and controlling the project.

	Checklist			
	4	3	2	1
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project
		Execute the Plan		
Project Team Building	Encourage open communications.	Conduct team sessions to improve communications and facilitate issue identification and resolution; build team identity; solicit and address team concerns.	Identify criteria for successful team performance; articulate strategy and plan for achieving team goals; develop metrics and monitor status; invest to improve team dynamics and cohesiveness.	Articulate a team building vision, objectives, and strategy; provide goals, supportive resources and tools, and meaningful measures of success; develop team ownership of this process.
Risk Metrics and Management	Identify issues to monitor using subjective or qualitative risk assessments; follow-up reporting risk issues at periodic reviews; highlight high risk areas and adverse trends.	Assign all risk areas low-medium-high assessment and update and report status and trends; use qualitative or subjective metrics if none better available.	Develop metrics for risk areas, report status and trends; track impact of risk control actions on lessening risks; focus on areas not responding to corrective actions	Develop metrics for risk areas, report status and trends; track impact of risk control actions on lessening risks; focus on areas not responding to corrective actions.
Project Reviews, Design Reviews, and Documenting the Work Results	Conduct key reviews of progress with sponsor and communicate status throughout project.	Conduct management and design reviews with key stakeholders; review plans, progress and changes; focus on early identification and management of risks.	Conduct periodic management and design reviews; emphasize early definition of requirements, validation of cost/schedule plans, verification of staffing and technology plans.	Schedule periodic cost, schedule, and issues reviews (frequently at first); plan for periodic reviews of design and at design milestones; facilitate reviews and working meetings in special interest areas.
Information Distribution	Identify key players and keep them informed; encourage and exercise information exchange within project team; identify information handoff dependencies in advance. Communicate status reports.	Communicate availability of work results; conduct regular meetings to identify critical issues.	Establish communications lists and interest area for all stakeholders; identify multiple media paths; solicit feedback on information adequacy; exploit technology to improve communications.	Identify information requirements of all stakeholders; ensure communication channels in place; track required message delivery; establish distribution lists by subject area. Solicit information on information adequacy.
Schedule Tracking and Management	Update project schedules to show actual progress and revisions compared to baseline plan; keep original schedule goals visible until formally replanned by PM.	Collect data for percent completions and planning revisions periodically; report status against traceable schedule baseline; document approaches to assessing project status.	Track schedule progress against formal baseline for all tasks; identify level of effort tasks; use repeatable procedures for data gathering, earned value assessment, and status reporting.	Document procedures for baseline management, schedule data collection and flow, data analysis and reporting.

	Checklist				
	4	3	2	1	
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project	
Quality Management, Quality Metrics, Measurements, and Controls	Consider quality management integral to project work; ensure project team understands role in achieving quality goals; have PM maintain visibility of quality issues. Conduct subjective (qualitative) or objective (quantitative) assessments periodically; monitor and report quality status at periodic project reviews.	Implement integrated quality management through delegated quality goals. Map quality metrics to quality goals, and report periodically; apply standard quality tools to measure, predict and control results.	Implement integrated quality management through delegated quality goals. Report quality metrics and track progress. Establish quality metrics and conduct quality audits to predict and verify achievement of goals and identify need for corrective actions; apply quality control techniques to project effort.	Implement integrated quality management through delegated quality goals. Monitor metrics and trends to achieve quality goals; Implement best practices quality control organization; document quality methods integral to project plan; provide commitment of staff, tools, and methods to support quality effort.	
Cost and Schedule Control System	Report on work accomplished and percent spent; track cost and schedule variances and performance indexes	Maintain traceable planning baselines to facilitate cost and schedule tracking; collect actual spending data to calculate variances and indexes to plan.	Establish time-phased budgets at WBS; maintain traceable baselines and collect data to report variances and indexes; adapt accounting systems to provide reliable, and timely information.	Document systems and procedures for cost and schedule control; compute variances at WBS; apply earned value implementation guide, if possible; apply criteria to determine system adequacy.	
Review Life Cycle Phases and Milestones	Review milestones, accomplishments, and deliverables.	Review project plan inputs with discussion of phases, deliverables, objectives and success criteria; review immediate milestones within project phases.	In addition, review project plan linkages between milestone approval reviews and documents, updated estimates, test results, etc.	Review event-based milestones; evaluate milestone exit criteria; link to deliverables, baseline document updates, test results, and management reviews.	
Project Change Management	Review and manage change to milestones, accomplishments, and deliverables.	Review and manage change to project plan inputs with discussion of phases, deliverables, objectives and success criteria.	In addition, review and manage changes between milestone approval reviews and documents, updated estimates, test results, etc. Manage overall change to project plan.	In addition, review and manage changes between milestone approval reviews and documents, updated estimates, test results, etc. Manage overall change to project plan. Be vigilant in managing change in project.	
Contract Administration	Follow-up with contractors to ensure compliance with delivery, performance, and cost requirements; manage changes deliberately and maintain good records.	Track and report contract awards, milestones, and deliverables; establish controls to verify specifications and manage changes.	Establish project files for all contracts, specifications, and deliverables.	Establish project office function to track contract modifications, deliverables (receipt, review, comments, and acceptance), contract correspondence; establish subcontract management role.	
		Deliverable (s)			
Status Reports	Communicate Status Reports	Communicate Status Reports	Communicate Status Reports	Communicate Status Reports	
Project	Ensure compliance with	Ensure compliance with	Ensure compliance with	Ensure compliance with	

	Checklist			
	4	3	2	1
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project
Deliverable (s)	requirements definition, delivery, performance, and cost requirements;	requirements definition, delivery, performance, and cost requirements;	requirements definition, delivery, performance, and cost requirements;	requirements definition, delivery, performance, and cost requirements;

Project Closing Checklist

The following table address the important activities of project closure.

	Checklist				
	4	3	2	1	
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project	
Deliverable/Product Verification	Convene a final meeting with Project Sponsor to review the deliverable(s) against the baseline requirements and specifications.	Convene a final meeting with all necessary stakeholders to review the deliverable(s) against the baseline requirements and specifications.	Convene a final meeting with all necessary stakeholders to review the deliverable(s) against the baseline requirements and specifications.	Convene a final meeting with all necessary stakeholders to review the deliverable(s) against the baseline requirements and specifications.	
Contract Review and Closure	Validate that contractor and agency has met all requirements. Document variances, resolve variance and issues. Ensure that vendor responsibilities have been transferred to the Agency or another vendor. Terminate contract. All contract files should be archived.	Validate that contractor and agency has met all requirements. Document variances, resolve variance and issues. Ensure that vendor responsibilities have been transferred to the Agency or another vendor. Terminate contract, develop transition lifecycle, if applicable. All contract files should be archived.	Validate that contractor and agency has met all requirements. Document variances, resolve variance and issues. Ensure that vendor responsibilities have been transferred to the Agency or another vendor. Terminate contract, develop transition lifecycle, if applicable. All contract files should be archived.	Validate that contractor and agency has met all requirements. Document variances, resolve variance and issues. Ensure that vendor responsibilities have been transferred to the Agency or another vendor. Terminate contract, develop transition lifecycle, if applicable. All contract files should be archived.	
Formal Acceptance	Approval of deliverable(s) is verified via the signature of a project closure document by all of the stakeholders who signed the original Project Plan.	Approval of deliverable(s) is verified via the signature of a project closure document by all of the stakeholders who signed the original Project Plan.	Approval of deliverable(s) is verified via the signature of a project closure document by all of the stakeholders who signed the original Project Plan.	Approval of deliverable(s) is verified via the signature of a project closure document by all of the stakeholders who signed the original Project Plan.	
Lessons Learned and Knowledge Management	The PM should provide a forum to discuss the various aspects of the project focusing on project successes, problems, issues, "lessons learned", and future process improvement recommendations. The Outcomes Assessment Report documents the successes and failures of the project	The PM should provide a forum to discuss the various aspects of the project focusing on project successes, problems, issues, "lessons learned", and future process improvement recommendations. The Outcomes Assessment Report documents the successes and failures of the project	The PM should provide a forum to discuss the various aspects of the project focusing on project successes, problems, issues, "lessons learned", and future process improvement recommendations. The Outcomes Assessment Report documents the successes and failures of the project	The PM should provide a forum to discuss the various aspects of the project focusing on project successes, problems, issues, "lessons learned", and future process improvement recommendations. The Outcomes Assessment Report documents the successes and failures of the project	
Documenting and Archiving	Typically the following project data are archived: Business Case, Project Plan, including Project Charter, Project Scope Statement, Risk Management Plan, etc., Financial Records, Correspondence, Meeting Notes, Status Reports, Contract Files, Technical Documents, Files,	Typically the following project data are archived: Business Case, Project Plan, including Project Charter, Project Scope Statement, Risk Management Plan, etc., Financial Records, Correspondence, Meeting Notes, Status Reports, Contract Files, Technical Documents, Files,	Typically the following project data are archived: Business Case, Project Plan, including Project Charter, Project Scope Statement, Risk Management Plan, etc., Financial Records, Correspondence, Meeting Notes, Status Reports, Contract Files, Technical Documents, Files,	Typically the following project data are archived: Business Case, Project Plan, including Project Charter, Project Scope Statement, Risk Management Plan, etc., Financial Records, Correspondence, Meeting Notes, Status Reports, Contract Files, Technical Documents, Files,	

	Checklist						
	4	3	2	1			
Category	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project			
	Programs, Tools etc. place under document management, and other documents and information.	Programs, Tools etc. place under document management, and other documents and information.	Programs, Tools etc. place under document management, and other documents and information.	Programs, Tools etc. place under document management, and other documents and information.			
Release Resources							
Celebrate Success							

Oversight of Multiple Projects

(Not a <u>PMBOK</u> item)

The following table illustrates techniques for managing multiple projects, using project categorization, a scaleable methodology, baseline reporting, and exception management.

		Checklist					
	4	3	2	1			
	Minor Agency Project	Small Agency Project	Major Project	Enterprise/Multi-Agency Project			
Area	Minor investment, informal schedule goals, low organizational priority and visibility.	Moderate investment, definite schedule target, some organizational priority and visibility.	Significant investment, important schedule goals, medium organizational priority and visibility.	Major investment, critical schedule goals, substantial organizational priority and visibility, significant technical and cost risks.			
Management Leadership	Require PM principles be applied to all projects; participate in project selection, approval, milestone reviews, and replan approvals; track baseline data for all projects.	Require PM disciplines be applied and maintained for all projects; oversee baseline controls, metrics tracking; maintain organization level PM tracking.	Maintain PM principles and disciplines from top management down; require implementation of PM policy and practices; build PM support infrasturcture.	Support project management as a core competency; show senior leadership and commitment in words and deeds; build infrastructure of policies, systems, organization and management practices.			
Organization and Staffing	Include project management in organizational priorities; align organization to support PM objectives; provide for PM in budgets for staff, training, and support systems.	Define explicit PM functions defined in organization; provide staffing to support metrics, methodologies, and tools.	Identify executive sponsors for all projects; maintain dedicated PM support functions; assign senior management POC for oversight of project methodologies, systems, and results.	Dedicate senior leadership to project management oversight; use <i>strong matrix</i> for PM organization; build project control and support staff; expect PM budget at 6% - 10% of project efforts.			
Policies and Procedures	Insist on application of project management principles and techniques: documented requirements, realistic plans, periodic reviews, and baseline management for cost, schedule, and technical goals.	Document PM methodology for flexible application to all projects; establish policies for project selection, approval, definition, baseline control, milestone reviews, and metrics.	Document PM methodology explicitly for each project; prioritize approval levels, summary metrics and exception reporting.	Establish a baseline exception management process; classify projects and invoke scaleable PM requirements; provide administrative infrastructure for reviews, tracking, and trend analysis.			
Systems and Tools	Provide software for integrated scheduling and resource estimating; track project budget, schedule and staff requirements; seek ways to summarize data and share support systems.	Provide software tools capable of exchanging data and rolling up multiproject summaries and resource leveling; share support tools for administration and controls.	Provide automated PM tools and methodology templates; maintain repository of systems, methods, and tools; track user requirement requests.	Establish enterprise-wide cost and resource tracking; provide family of tools for schedule tracking, data management, action item tracking, cost estimating, historical data bases, etc.			

Project Management Principles

The Project Management Institute's Project Management Body of Knowledge (PMBOK) provides a comprehensive structure for addressing the scope of project management activities. However, there is a need to provide **extra emphasis** in certain areas, so the project manager is not simply confronted by an overwhelming list of techniques, clearly excessive for some project environments. Successful project management is better achieved by the intelligent application of sound principles, than by merely implementing a list of standard techniques.

Project management principles are most often learned from experience, and they have universal validity for **all** projects. It is up to you to apply them intelligently to your project. I would rather trust a project manager who deeply believed in these principles and acted on them, than one who had simply learned the entire scope of project management techniques. It is a matter of emphasis. Principle Based Project Management begins with these principles:

- Rule #1- Figure out what business you are in, and then mind your own business. Figure out what business you are in. Make sure your business is viable. Select projects that are good for your business. Understand the business value in your project and watch for changes. Be diligent in your chosen business, learning and applying best practices. Define what is inside and outside your area of responsibility. 50% of project management is simply paying attention.
- Rule #2 Understand the customer's requirements and put them under version control. Thoroughly understand and document the customer's requirements, obtain customer agreement in writing, and put requirements documents under version identification and change control. Requirements management is the leading success factor for systems development projects.
- Rule #3 Prepare a reasonable plan. Prepare a plan that defines the scope, schedule, cost, and approach for a reasonable project. Involve task owners in developing plans and estimates, to ensure feasibility and buy-in. If your plan is just barely possible at the outset, you do not have a reasonable plan. Use a work breakdown structure to provide coherence and completeness to minimize unplanned work.
- Rule #4 Build a good team with clear ownership. Get good people and trust them. Establish clear ownership of well-defined tasks; ensure they have tools and training needed; and provide timely feedback. Track against a staffing plan. Emphasize open communications. Create an environment in which team dynamics can gel. Move misfits out. Lead the team.
- Rule #5 Track project status and give it wide visibility. Track progress and conduct frequent reviews. Provide wide visibility and communications of team progress, assumptions, and issues. Conduct methodical reviews of management and technical topics to help manage customer expectations, improve quality, and identify problems before they get out of hand. Trust your indicators. This is part of paying attention.

- Rule #6 Use Baseline Controls. Establish baselines for the *product* using configuration management and for the *project* using cost and schedule baseline tracking. Manage changes deliberately. Use measurements to baseline problem areas and then track progress quantitatively towards solutions.
- Rule #7 Write Important Stuff Down, Share it, and Save it. If it hasn't been written down, it didn't happen. Document requirements, plans, procedures, and evolving designs. Documenting thoughts allows them to evolve and improve. Without documentation it is impossible to have baseline controls, reliable communications, or a repeatable process. Record all important agreements and decisions, along with supporting rationale, as they may resurface later.
- Rule #8 If it hasn't been tested, it doesn't work. If this isn't absolutely true, it is certainly a good working assumption for project work. Develop test cases early to help with understanding and verification of the requirements. Use early testing to verify critical items and reduce technical risks. Testing is a profession; take it seriously.
- Rule #9 Ensure Customer Satisfaction. Keep the customer's real needs and requirements continuously in view. Undetected changes in customer requirements or not focusing the project on the customer's business needs are sure paths to project failure. Plan early for adequate customer support products.
- Rule #10 Be relentlessly pro-active. Take initiative and be relentlessly proactive in applying these principles and identifying and solving problems as they arise. Project problems usually get worse over time. Periodically address project risks and confront them openly. Attack problems, and leave no stone unturned. Fight any tendency to freeze into day-to-day tasks, like a deer caught in the headlights.

^{*} Reference: Modified from material originally developed by: James Chapman, PMP http://www.hyperthot.com/pm_meth.htm © Copyright 1997, James R. Chapman